

ABSTRACT

In a method and system for effecting bi-directional IR data communication between an object transceiver and a reader, the object transceiver transmits successive data packets to the reader, and upon termination of a transmission of each data packet, opens a time window for receiving a transmission from the reader. The object transceiver is typically one of a plurality of object transceivers each worn by a person to whom a short message is to be transmitted and each having a respective unique ID and being able to effect autonomous transmission to the reader. In such case, each object transceiver transmits for a negligible fraction of its duty cycle thereby reducing a likelihood that two or more object transceivers will try to transmit simultaneously. Alternatively, the same objective can be realized by controlling each object transceiver to have a randomly variable duty cycle.